

Challenges in Pulmonary and Critical Care: 2020

Final Live Outcome Report



Alpha-1 Antitrypsin Deficiency: Why Diagnose and Why Treat?

Grifols Grant ID : 004222

February 9, 2021



Executive Summary

This activity focused on review of the pathophysiology and impact of alpha-1 antitrypsin deficiency (AATD) on chronic obstructive pulmonary disease (COPD) risk; utilization and proper interpretation of testing for AATD; and integration of practical guidelines to detect, and latest guideline recommendations to effectively manage AATD.



548 total attendees



1 Live Virtual Broadcast

- 548 attendees in multiple professional specialties were reached in this program.
- Improvement across all learning domains was noted ranging from 55% to an impressive 144%.

Overall, the program improved the ability of learners to recognize the prevalence of severe AATD among patients with COPD; recognize ineffective vs. effective testing for AATD; improve interpretation of the guidelines regarding specific screening recommendations; and identify ineffective vs. effective strategies to enhance screening for AATD.

Persistent Educational Gaps

Despite educational gains, PCA scores demonstrate some loss of these educational gains over time:

- ❖ Recognition of prevalence of AATD among patients with COPD;
- ❖ Recognition of pulmonary function tests (PFTs) that are ineffective for ruling out AATD;
- ❖ Recognition of ineffective screening modalities.

Significant baseline educational gaps in pre-activity learners were noted:

- ❖ Only 18% correctly identified the prevalence of AATD in COPD patients;
- ❖ Only 42% correctly identified specific PFTs as insufficient to rule out AATD;
- ❖ Only 23% appreciated strategies that have proven insufficient to increase detection for AATD.

Of great significance, nearly half of pre-activity learners (49%) were not at all confident in their ability to treat patients with AATD. These findings represent clear gap in knowledge and an unmet need among clinicians, underscoring that this topic continues to be an important area for future educational programs.

Learning Objectives

- Discuss the pathophysiology of AATD and its impact on COPD risk
- Utilize and interpret laboratory test results for AATD
- Devise management plans for AATD that incorporate the latest guideline recommendations
- Integrate practical guidelines to enhance detection and treatment of AATD in clinical practice

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Commercial Support

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- Actelion Pharmaceuticals US, Inc.
- AstraZeneca Pharmaceuticals
- Bayer HealthCare Pharmaceuticals Inc.
- Grifols
- Jazz Pharmaceuticals, Inc.
- ST Shared Services LLC

Levels of Evaluation

Consistent with the policies of the ACCME, NACE evaluates the effectiveness of all CME activities using a systematic process based on Moore's model. This outcome study reaches Level 5.

Level 1: Participation

Level 2: Satisfaction

Level 3: Declarative and Procedural Knowledge

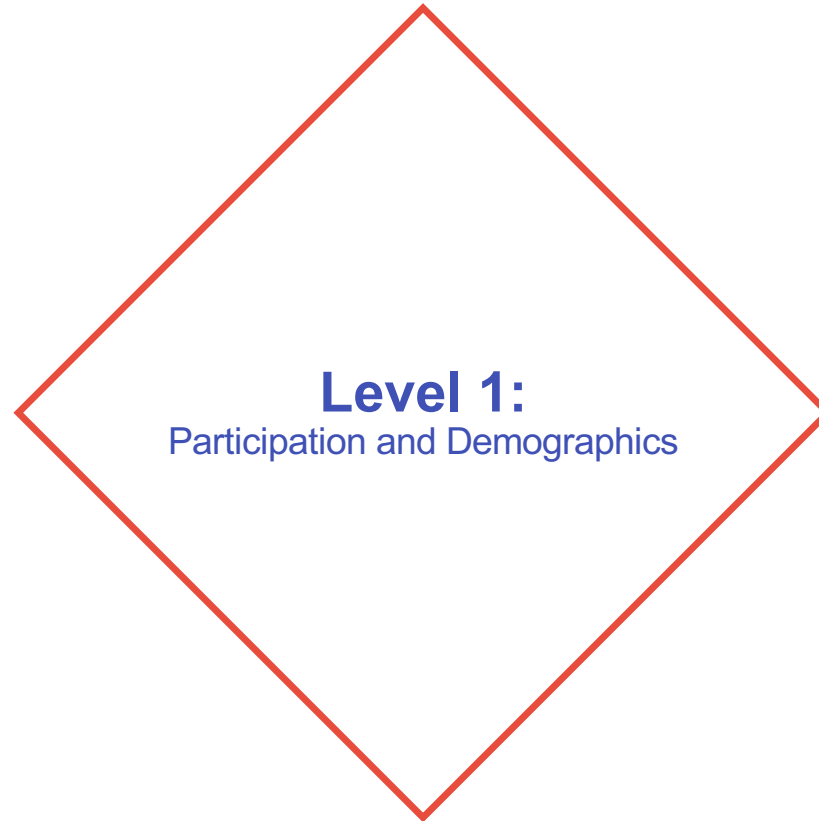
Level 4: Competence

Level 5: Performance

Level 6: Patient Health

Level 7: Community Health

Moore DE Jr, Green JS, Gallis HA. Achieving desired results and improved outcomes: integrating planning and assessment throughout learning activities. J Contin. Educ. Health Prof. 2009 Winter;29(1):1-15



Level 1: Participation



548 total attendees



1 Live Virtual Broadcast



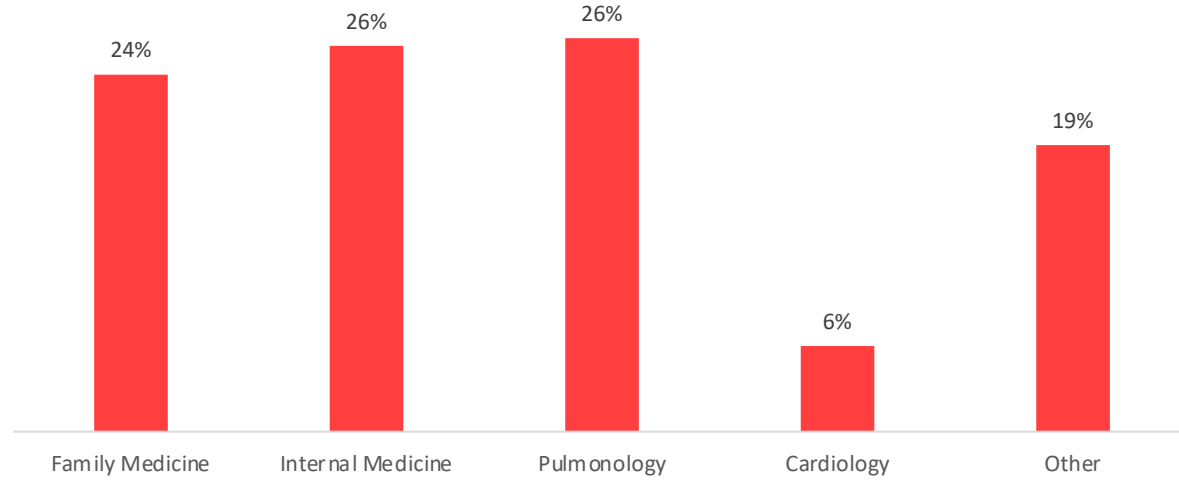
95%

Provide direct patient care

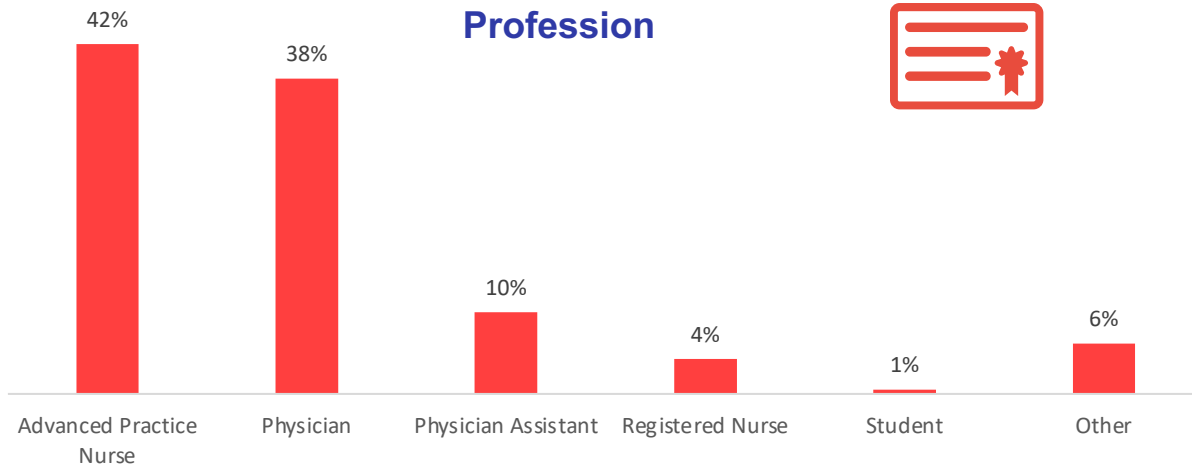
Activity	Date	Attendees
Challenges in Pulmonary and Critical Care	12/12/2020	548
Total		548

Level 1: Demographics and Patient Reach

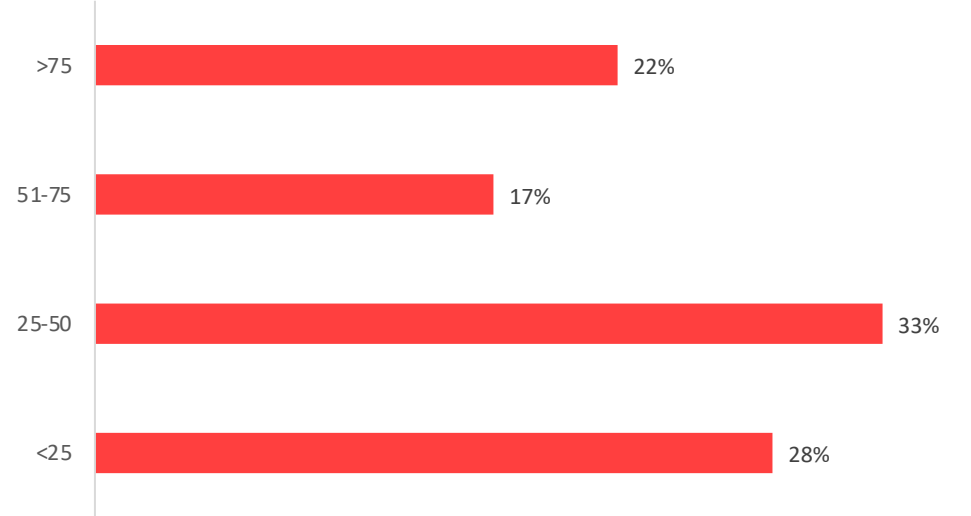
Specialty



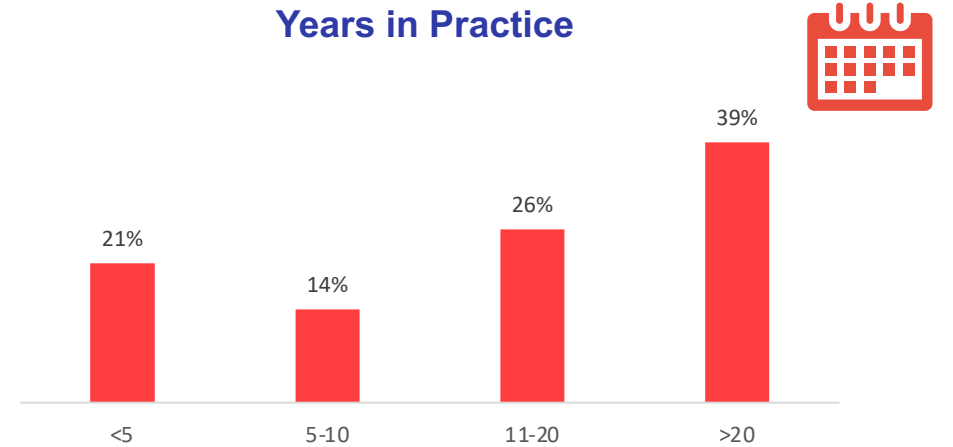
Profession



Patients seen each week, in any clinical setting:



Years in Practice





Level 2-5:
Outcomes Metrics

Level 2: Satisfaction



97% rated the activity as excellent



98% indicated the activity improved their knowledge



95% stated that they learned new and useful strategies for patient care

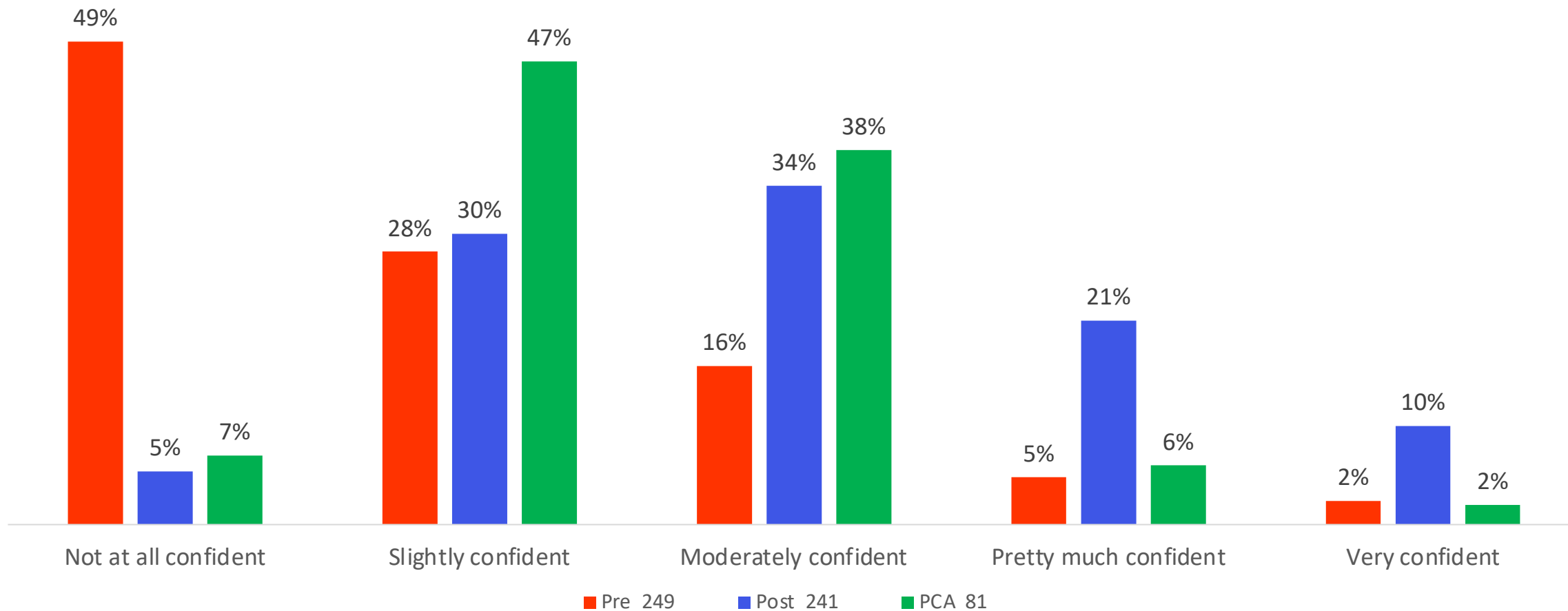


86% said they would implement new strategies that they learned



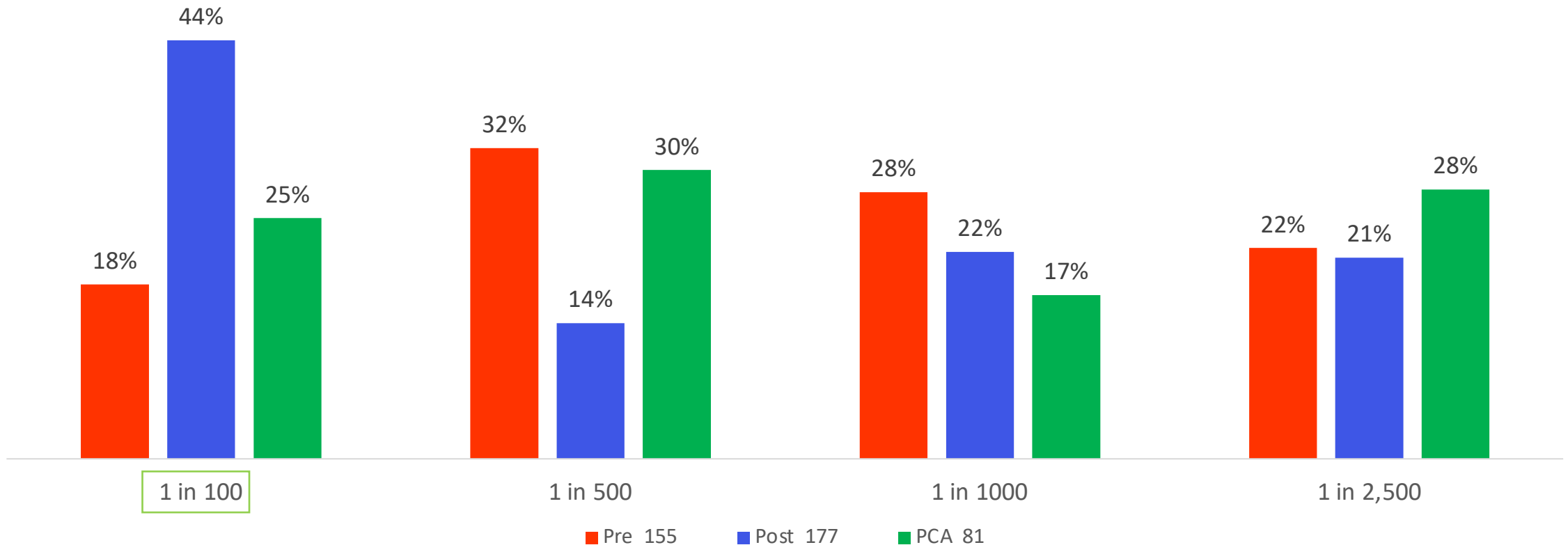
96% said the program was fair-balanced and unbiased

How confident are you in your ability to treat alpha-1 antitrypsin deficiency?



Among your patients with COPD, what is the likely prevalence of severe alpha-1 antitrypsin deficiency?

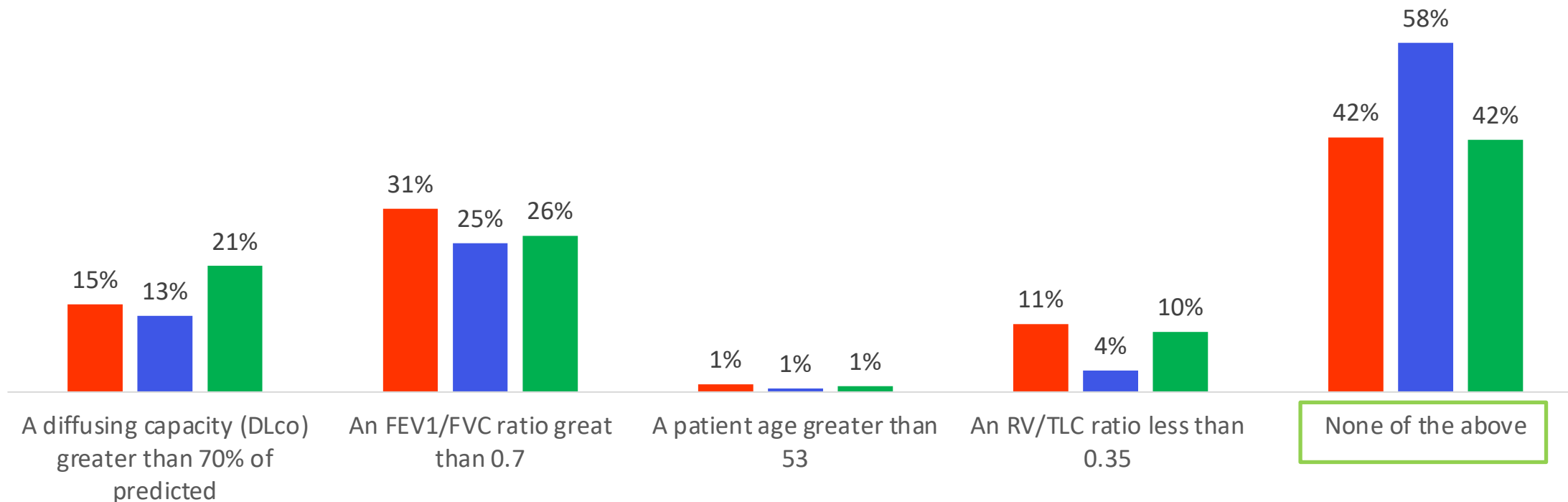
P Value: <0.05



Pre-Post Change	144%
Pre-PCA Change	39%

Which value on Pulmonary Function Testing rules out alpha-1 antitrypsin deficiency?

P Value: <0.05

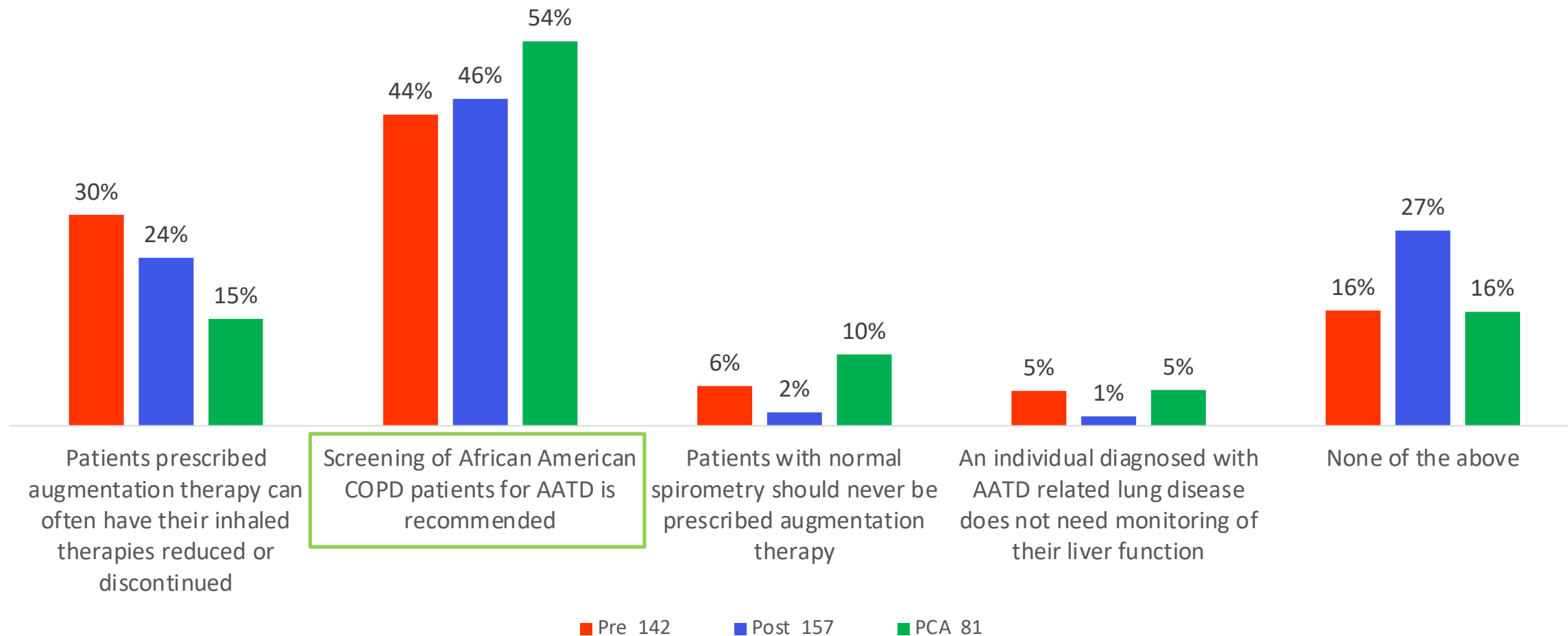


Pre 151 Post 165 PCA 81

Pre-Post Change	38%
Pre-PCA Change	0%

Based on the most recent guidelines, which of the following is true?

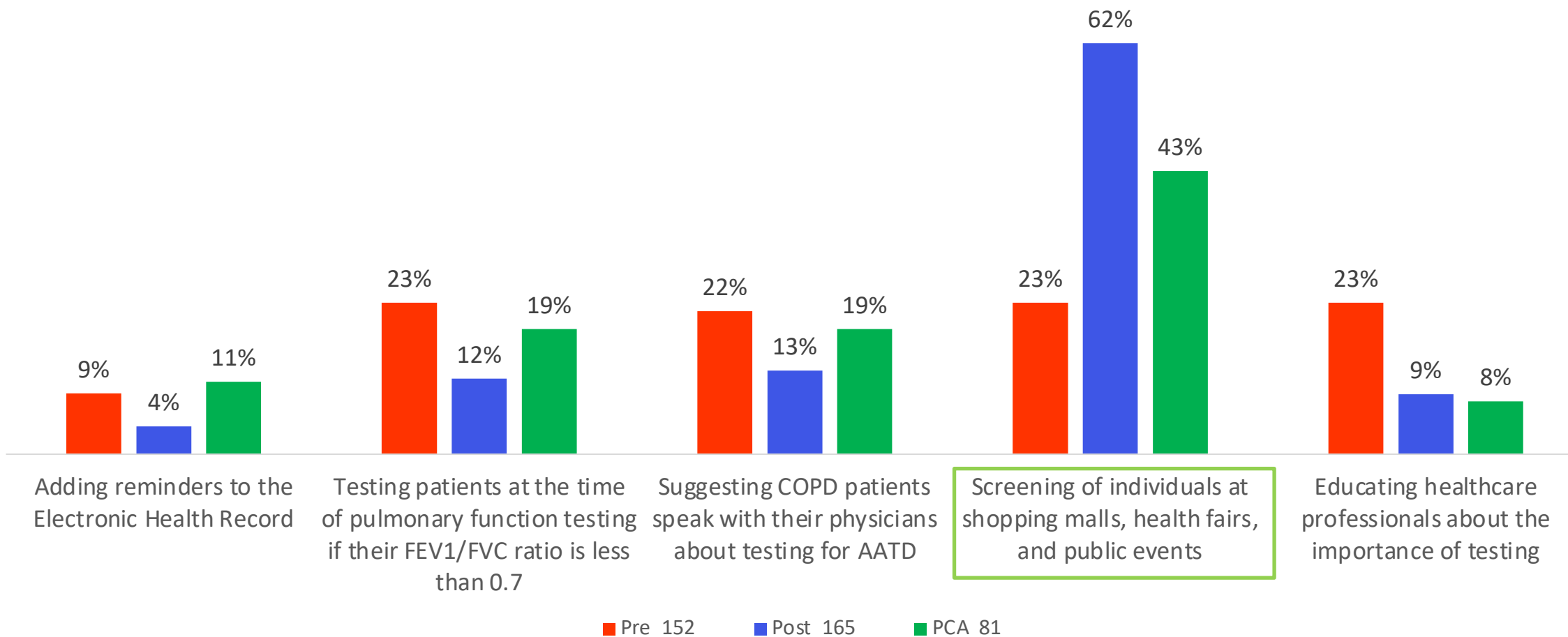
P Value: <0.05



Pre-Post Change	5%
Pre-PCA Change	23%

Which of the following has failed to increase detection of alpha-1 antitrypsin deficiency?

P Value: <0.05

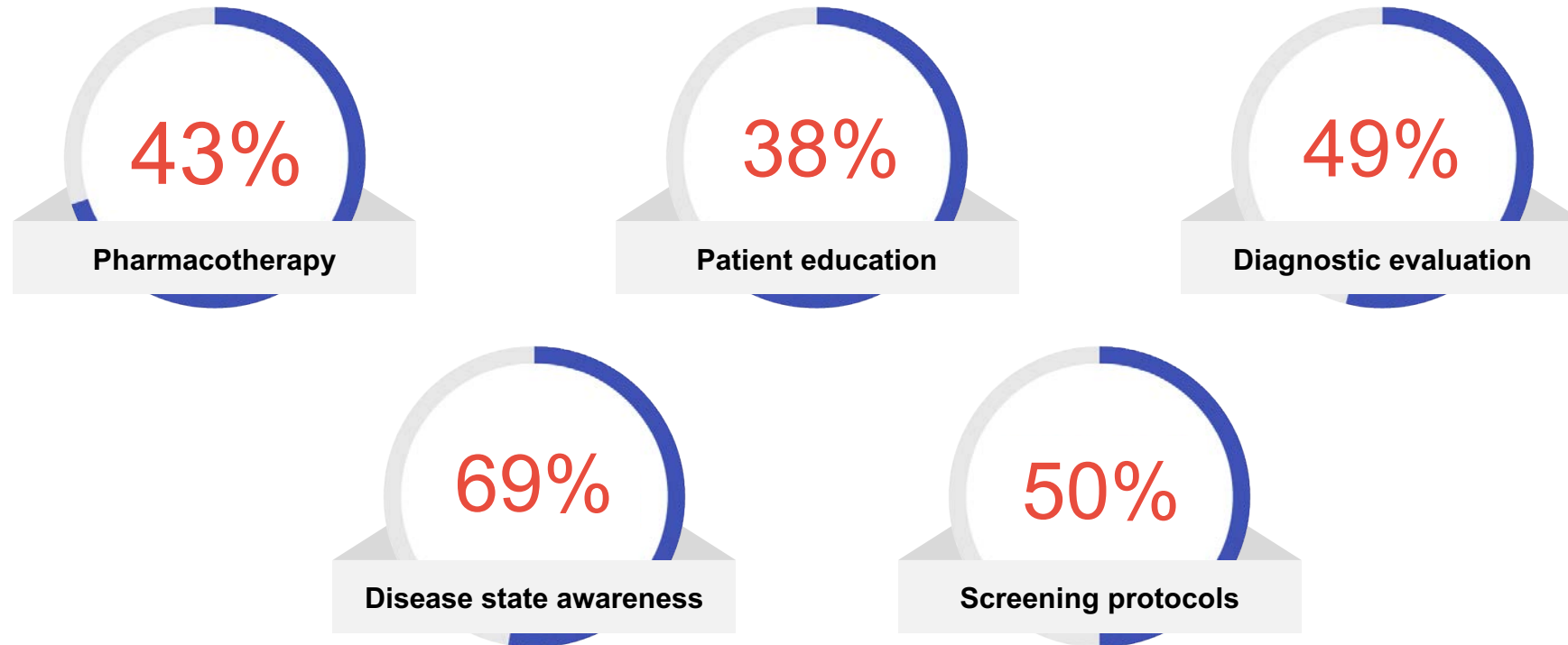


Pre-Post Change	170%
Pre-PCA Change	87%

(4-week Post Assessment)

Please select the specific areas of *skills, or practice behaviors*, you have improved regarding the screening, diagnosis and treatment of Alpha-1 Antitrypsin Deficiency since this CME activity. (Select all that apply.)

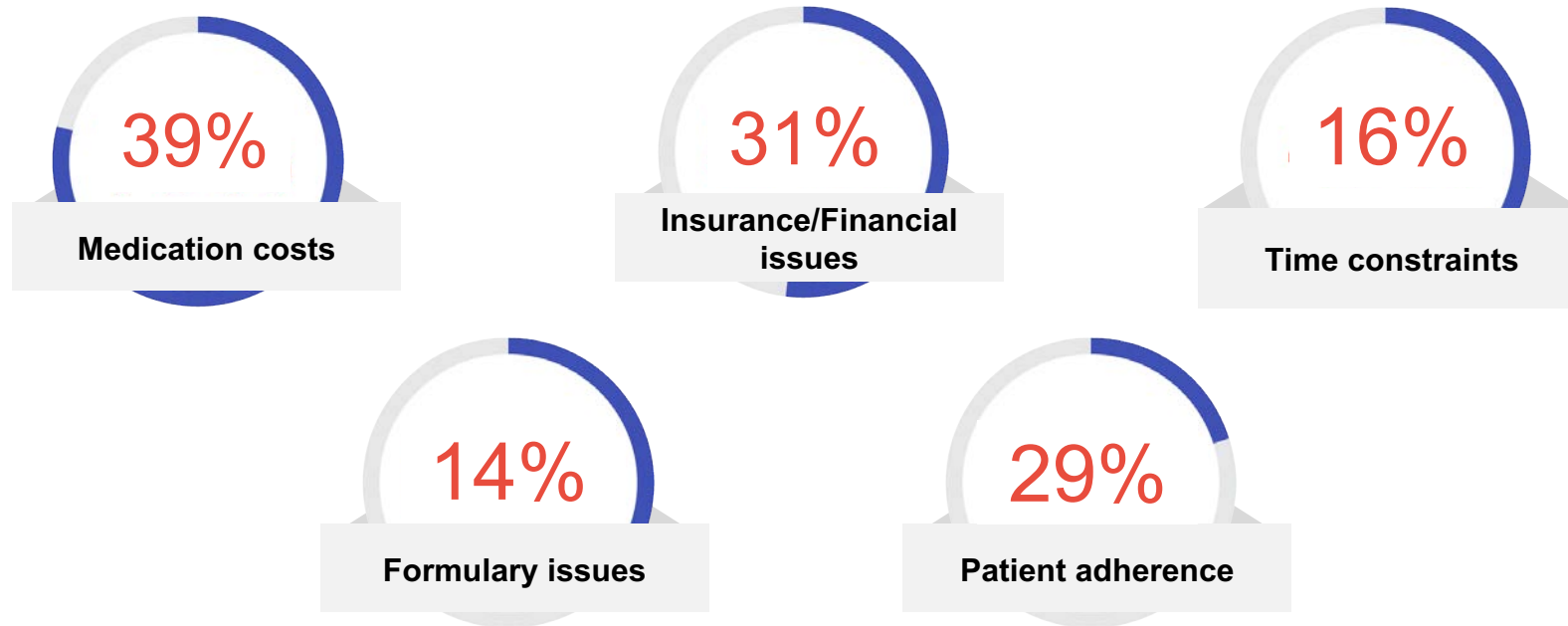
N=81



(4-week Post Assessment)

What specific *barriers* have you encountered that may have prevented you from successfully implementing screening, diagnosis and treatment of Alpha-1 Antitrypsin Deficiency since this CME activity? (Select all that apply)

N=81



Participant Educational Gains

144% improvement in the recognition of prevalence of severe AATD among patients with COPD

5% increase in appropriate interpretation of guidelines for specific screening recommendations to include screening of African American COPD patients

38% improvement in recognition of what is effective versus ineffective testing to rule out a diagnosis of AATD

170% increase in recognition of what are effective versus ineffective strategies for increasing screening for AATD



Persistent Educational Gaps After 4 Weeks

Recognition of prevalence of severe AATD among patients with COPD

Recognition of appropriate versus inappropriate testing that could rule out a diagnosis of AATD

Knowledge of the most recent screening recommendations for AATD

Identification of effective versus ineffective strategies to increase screening for AATD



Key Take-home Points

Learners increased confidence to some degree overall, and from a baseline of 49% who were not at all confident in their ability to care for patients with AATD prior to the presentation

After 4 weeks, gains in recognition of appropriate interpretation of screening guidelines were not only maintained but improved, suggesting integration of this knowledge into practice

98% of learners indicated that they gained new knowledge as a result of the presentation, identifying disease state awareness and screening protocols as skills that they have specifically improved

Initial confidence (pretty much or very confident) increased immediately post-presentation, but declined to "slightly" or "moderately" confident after 4 weeks, indicating need for sustained exposure to education on this topic

